Building Capacity for Integrated Coastal Management in the Tonkin Gulf: Socialist Republic of Vietnam, Quang Ninh Province

U.S. State Department/Agency for International Development:

East Asia-Pacific Environment Initiative



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Submitted by

U.S. National Oceanic and Atmospheric Administration National Ocean Service, IUCN- The World Conservation Union (Vietnam),

and Reef Check







Executive Summary

The Vietnamese government is making a concerted effort to develop an integrated coastal management regime as it undergoes political and economic reform aimed at economic development. As the country seeks to build societal capacity to design and implement effective sustainable coastal development practices and policies while promoting economic development, it must preserve biological productivity of the coastal and marine environment while developing poverty reducing opportunities for its people. International organizations, such as the Global Environmental Facility, IUCN-World Conservation Union, UN Development Program, Reef Check and others, are seeking financial and technological resources at Vietnam's request to help that country build indigenous coastal and marine management capacity, promote sustainable development practices, and manage emerging sectoral conflicts.

This proposal develops local and regional institutional, community, and technological capacity for coastal and marine resource management in the Gulf of Tonkin Archipelago as a valuable anchor in support of Vietnam's national development policy goals. This East Asia Pacific Environmental Initiative (EAPEI) proposal allows Vietnam to access the experience, knowledge, technical expertise, and technology of the United States in marine protected area management in partnership with international, governmental and nongovernmental organizations. It creates an Integrated Coastal Management (ICM) demonstration site in Vietnam based upon national goals, regional planning, and local management needs. By building public participation and deploying advanced technologies and methods pioneered in the U.S., this effort produces a functioning success story for ICM and Marine Protected Area (MPA) management in the Northwest Tonkin Archipelago (NTA). At the completion of the two year work plan, Vietnam will have institutionalized consultative and multisectoral planning and management mechanisms with proven results, incorporating tools such as GIS, marine boundary zoning systems, environmental and sociological monitoring and assessment systems, community education and outreach campaigns-all of which are critical elements in effective integrated coastal management.

The EAPEI request of \$200,000 will be leveraged with funding and in-kind contributions from the National Oceanic and Atmospheric Administration, the Global Environmental Facility (GEF), IUCN- The World Conservation Union, Reef Check and others to introduce conceptual frameworks for integrated coastal management, enhance distribution and access to Vietnamese language curricula and educational material for broad government and nongovernment audiences through the internet and other media, transfer and deploy technologies and processes to support management to improve marine and coastal management in an important part of Asia. Following this program, Vietnam will have a stronger capacity to define coastal management issues, design methodologies to identify solutions, collect information to monitor and evaluate environmental change, and develop effective, timely management responses over time.

Justification: Overview and Outputs

The Vietnamese government is endorsing principles of sustainable development as it undertakes economic reform measures following decades of war and relative international isolation. This proposal enables the Vietnamese government to access U.S. expertise, training and technologies in support of goals and plans of other international organizations in recent years, including IUCN, Reef Check, Danida, UNDP, and GEF/WB.

This two-year program produces the following outputs:

- 1. Development of integrated, multidisciplinary, participatory, and community-based management plans for the Gulf of Tonkin Archipelago based upon an improved governmental capacity to identify development issues and threats, collect and analyze appropriate data, and display status and trends information. This planning will take place within an integrated management plan emphasizing community participation;
- 2. Technology transfer for collecting data and developing geographical information system decision support products, deploying and operating environmental monitoring networks, and installing mooring buoy markers for marine zoning;
- 3. Consultative and coordinating mechanisms established among the Vietnamese governmental and non-governmental stakeholders. Ultimately possibilities for cooperative and consultative efforts will be promoted between relevant institutions in the Vietnam region of the NTA and relevant Chinese marine institutions in the region bordering the NTA.
- 4. A set of indicators for monitoring socio-economic and biophysical conditions will be applied to local management contexts;
- 5. A pilot assessment of socioeconomic conditions and a report on biophysical conditions in the Northwest Tonkin Archipelago co-developed with the IUCN World Conservation Union;
- 6. A Project report summary and documentation.

Activities

This two year program will foster human and technical capacity for day to day management of coastal and marine resources and support the development of sound policies to guide sustainable development in the Northwest Tonkin Archipelago region. The suite of activities is integrated with efforts of IUCN, GEF, and Reef Check and creates an operational capacity in the region upon which expanded geographic application will be promoted. This program contains eight focused activities:

<u>Activity 1</u>: Integrated Coastal Management Training Workshop and Kickoff Meeting (total:\$53K; EAPEI:\$25K; other USG and Nongovernmental: $\$28\ K^{l}$)

The U.S. National Ocean Service and the IUCN will co-sponsor a one week training workshop on the principles and practices of ICM to be held in Vietnam with approximately 20 Vietnamese professionals involved in coastal and marine resource management in Vietnam (including officials from Quang Ninh and Hai Phong provinces, national training center at Nha Trang, representatives of the proposed Hon Mun Marine

¹ Budget figures include contributions from EAPEI, IUCN/GEF, and NOAA and are detailed in the Appendix 3

Protected Area (MPA) Pilot Project, and the Ha Long Bay World Heritage Site). The agenda and workshop sessions will provide specific course work in understanding and managing intersectoral use conflicts, exchange experiences and lessons learned from ICM applications in the developed and lesser developed world, address ways to improve the support of community stakeholder participation in resource management, identify plans to deepen community education and outreach, promote ecotourism, and provide an overview of technology and information management for evaluating natural resource status, trends, and threats. This workshop will also be an important kick-off meeting to creating the management network of leaders who will be involved in this program and define key participants in the region. The EAPEI funding provides for four or five international instructors to travel to Vietnam, meeting room rental, logistics, accommodation and food for participants, and development of a summary report of the Workshop. In kind contributions for salary and benefits of international experts to develop the workshop agenda and instruction is provided by the National Ocean Service (NOS) and IUCN as well as travel support.

Activity 2: ICM from Theory to Management Practice: Framework Management Plan Development for 2003 and 2004 (total: \$88K; EAPEI: \$57K; other USG and Nongovernmental: \$31K)

The success of this overall project relies upon application of ICM principles to specific, localized resource management issues over time. It is a sustained and iterative process that involves collective identification of issues, developing actions to address information gaps, and designing and implementing activities along various societal, economic, scientific, and cultural disciplines.

This activity provides funding to host one week workshops in Fall 2002 and Fall 2003 with approximately ten selected Vietnamese stakeholders, including management officials, experts, community representatives. This activity builds upon Activity 1 and provides a forum for incorporating results of other activities in this program (such as Activities 4, 5, 6, 7) into the overall management planning processes for the NTA demonstration site.

Workshop sessions will identify appropriate environmental monitoring technologies used in the U.S. and demonstrate their relevant application in Vietnam. Sessions will illustrate applications of environmental data analysis for managers, communities and policy makers and provide training in GIS applications for coastal characterization. Specific education and outreach programs will be designed. These aspects will create strategies integrated within a comprehensive management approach that enhance public and intergovernmental support, as well as improve the effectiveness of coastal management. Language translation will be provided, as needed.

In preparation and following the workshops, field work will be performed to provide basic characterization of such issues as land use practices, general habitat distribution, water quality conditions, and other critical human and natural parameters for effective management decision-making. In addition to meeting and training costs, computer hardware and software will be procured to facilitate successful application of principles to local contexts.

<u>Activity 3:</u> Socioeconomic Assessment Training Workshop and Community Assessment (total: \$42K; EAPEI: \$30K; other USG and Nongovernmental: \$12K)

A five day workshop will be held in summer 2002 to introduce socioeconomic training methodology and practices based upon those set forth in the *Global Coral Reef Monitoring Network Socioeconomic Manual for Coral Reef Management* (1999). As part of the workshop participants will design a socioeconomic assessment work plan for the NTA. The workshop will be targeted to an audience of Vietnamese coastal managers and social scientists. Following this workshop, the Vietnamese participants will undertake a pilot survey and assessment, with consulting assistance from the National Ocean Service. The EAPEI budget provides funding for workshop room rental, costs associated with field work and surveys of one month, costs for data analysis and report development and production, and travel of two teams to Vietnam for the workshop and follow-up assessment work.

<u>Activity 4:</u> Habitat Mapping and Monitoring(total: \$43K; EAPEI: \$30K; other USG and Nongovernmental:\$13K)

This activity will expand an existing habitat monitoring volunteer program in Vietnam pioneered by Reef Check/Global Coral Reef Monitoring Network to improve spatial and thematic habitat mapping of corals and develop new monitoring and data on habitats that could include sea grass and mangrove distribution. Trainers from Reef Check and/or the United States (through National Estuarine Research Reserve system, the National Sea Grant College Program, and other networks) will provide training on habitat mapping to expand current efforts through the Southeast Asian Regional Coral Reef Management Training Center based in Thailand and currently supported by an EAPEI Grant. EAPEI funding will expand the breadth and depth of monitoring, mapping, and management capacity of key habitat in Vietnam through specific applications. In addition, ecological in situ mapping and monitoring may be supported with limited acquisition of aerial photogrammetry and/or satellite imaging.

In addition, approximately three autonomous data loggers will be purchased and deployed in selected sites in the Gulf of Tonkin Archipelago to collect periodic data on basic marine water quality (such as salinity, pH, current, temperature, sediment). Data from habitat monitoring and water quality conditions will be used for baseline documentation and periodic assessment of ecological conditions. EAPEI funding will be used to support purchase and transport of equipment, international travel of experts to Vietnam, and onsite training. The National Ocean Service will provide in-kind contributions of salaries and consulting fees for U.S. experts.

Activity 5: Community Outreach and Education (total: \$35K; EAPEI: \$15K; other USG and Nongovernmental: \$20K)

Community Outreach and Education Plans and materials will be developed to communicate information about the marine and coastal environment to local audiences (local villagers, fishermen, farmers, merchants, etc...) in the NTA area. The educational materials will be based on and help disseminate information derived the economic valuation studies (see Activity 5). Other concepts such as habitat, runoff, fisheries recruitment, water quality, community support of management goals, marine science principles, will be include in the educational plan as appropriate. These plans and associated community efforts will be integrated within the overall ICM Theory to Practice framework activities.

Activity 6: Boundary Marking (Mooring Buoys) (total: \$30K; EAPEI: \$20K; other USG and Nongovernmental: \$10K)

Installation of fixed buoys in water bodies can be used to supply mooring sites for fishing and other vessels thereby avoiding damage to the benthic environment, and to clearly delineate important marine boundaries (including restricted zones) in near shore environments. Boundary marking is an important tool in marine functional zoning and effective marine management. Based on the successful mooring buoy deployment and technology transfer project led by the National Ocean Service in the Sanya Coral Reef Reserve on Hainan Island of China in 2000, the U.S. Florida Keys National Marine Sanctuary will transfer mooring buoy technologies (including hydraulic power unit, hydraulic drill, imbedded anchor eye, buoys, etc...) and provide field training to Vietnamese managers and divers for the installation of approximately 10 mooring buoys in North Tonkin Gulf Archipelago. Skills and technologies transferred to Vietnamese managers will be used by the trainees to further expand buoy networks along Vietnamese coastal waters to enhance marine and protected area management.

<u>Activity 7:</u> Building a Gulf of Tonkin Regional Marine Protected Area Management Network (total: \$9K; EAPEI: \$4K; other USG and Nongovernmental: \$5K)

The Gulf of Tonkin is a semi-enclosed water body bordered by the Socialist Republic of Vietnam and the People's Republic of China. In December 2000, both governments defined the marine boundary between Vietnam and China, thereby removing a previously long-standing obstacle to cooperation. The U.S. National Ocean Service and IUCN-World Conservation Union are working with Vietnamese and Chinese authorities responsible for management of the Gulf in their respective zones (see for example www.nos.noaa.gov/ipo/china/beibugulf.html). In Fall 2003, NOS and IUCN will cosponsor a small regional workshop with Vietnam and China to comprehensively summarize management issues, national capacities, management obstacles (including fisheries), and needs for regionally cooperative, environmentally sound management of the Beibu and North Tonkin Gulf based on Vietnamese and Chinese shared-leadership. A primary outcome of this workshop will be establishment of a regional network of Marine Protected Areas integrating MPA efforts at existing and proposed Vietnamese and

Chinese marine protected area sites, including Sanya Coral Reef Reserve (Hainan), Weizhou-Xieyang Island (proposed MPA in Guangxi Zhuang A.R.), Shankou National Mangrove Research Reserve (Guangxi Zhuang) in China, and Halong Bay WHS, Coto Island, Bach Long Vi, Dao Tran Island, and CatBa Island proposed MPAs in the North Tonkin Gulf Archipelago of Vietnam.

Activity 8: Translate Selected Document and Text materials for Integrated Coastal management (ICM) Education in Vietnamese Language and Publish key relevant books, reports and ICM documents (total: USG and Non-governmental:\$10K)

To reach a broad audience of practitioners, students, educators, and stakeholders, NOS and IUCN will identify and oversee the translation of key works in integrated coastal management and marine protected area management, potentially including proceedings of the above ICM workshop, US Status and Trends: 1999, IUCN MPA Guidelines, and Reef Check Methodology. Importantly, several of these translations are already available or are in preparation in other Asian languages. Translation of common documents supports development of common concepts and practices for development of regionally coordinated management measures. Documents will be proposed by the IUCN and National Ocean Service for approval by the Vietnamese government prior to translation.

This activity will not receive funding from the EAPEI Grant but is referenced herein as an important activity that is integral to the overall ICM project. Funding and other support will be provided by the National Ocean Service of NOAA and IUCN – Vietnam.

Funding for budget and financial oversight is described below. Please see the initial chronology of activities and Gantt chart in appendix 2.

Performance Measurement Plan

Vietnam's Governmental capacity to employ Integrated Coastal Management practices and principles will be strengthened as a result of the financial and programmatic support leveraged through the this EAPEI grant. The activities will be measured by the degree to which they achieve specific objectives:

Activity	Performance Evaluation Measures and Criteria	
Integrated Coastal Management Training Workshop and Kickoff Meeting	Participation of key diverse Vietnamese organizations. Successful broad-based introduction of ICM concepts to the participants. She commitment, participation, and contributions for this forthcoming Gulf of Tonkin program from the participants. Production and distribution of proceedings in Vietnamese to relevant government.	
	organizations, universities, and groups. Collective confirmation of work plan and schedule guiding two year program.	
Integrated Coastal Management Theory into Practice: Development of ICM Plans for NTA for 2003 and 2004	Production of Integrated Coastal Management Outline in Fall 2002, review and update in Fall 2003 and subsequent years incorporating transboundary, multisectoral, community, and interdisciplinary issues and strategies in resource management. Successful transfer of capability to operate, design and utilize GIS in	
	coastal management decision-making development. Utilization of valid and reliable GIS products to support management assessment	

Socioeconomic Assessment	and decision-making in the Gulf of Tonkin Archipelago. Ability to plan across agencies and across stakeholder groups. Integration of results and accomplishments of activities undertaken in the context of the two year program within an integrated coastal management plan. Utilization of standard sociological methodology by Vietnamese
Training Workshop and Community Assessment	experts to produce a socioeconomic profile of publishable quality for coastal communities in the area of the North West Tonkin Archipelago. Utilization of socioeconomic information in management, planning, and decision-making
Habitat Mapping and Monitoring	Utilization of new environmental data for improved and scientifically-based decision making. Use of this baseline data to assess trends and environmental change over time.
Community Outreach and Education	Development of a Plan of Action to build community-government relationships to expand community participation and support of shared goals for resource management. Based on this plan, the production and physical distribution of education materials, including visiting speakers, will be implemented in a sustained program of education and outreach.
Boundary Marking (Mooring Buoys	Buoys installed and used to mitigate use impacts on selected marine zones and the successful transfer of the ability of local officials to expand the marine buoys network to other areas following field project.
Regional Workshop on Biogeographical Management of the Gulf of Tonkin	Bilateral dialogue of key marine management institutions responsible for the Gulf of Tonkin since the early 1960s and bilateral Sino-Vietnamese agreement to improve data and information exchange concerning environmental management and marine science issues pertinent to the Gulf. Increasing coordination and integration of currently disparate efforts to protect the marine biodiversity and productivity of the Gulf of Tonkin/Beibu Gulf. Identification of experts and establishment of communication and information sharing relationships.
Translate and publish key relevant books, documents	Provision and utilization of ICM documents and literature for use by Vietnamese coastal and marine managers, educators, and students who would not otherwise receive access to this information.

The proposed activities in this EAPEI grant include performance measures to assess and verify accomplishments and identify needed interventions to improve effective implementation of this project. In year one, training workshops and technical exchanges will provide the knowledge base and follow-up assistance to work with the Vietnamese authorities to define issues, assess current conditions and trends, and develop strategies to meet management needs. The first year concludes with the development of a preliminary integrated coastal management plan for the NTA area. In year two, field work and site specific data analysis is expanded and further incorporated into updated management plans. A work schedule is designed to manage time, cost, and scheduling of necessary activities of this EAPEI program (see appendix 2).

The final success of this Project will be measured by the degree to which A) participatory, integrated management and planning has been fostered, B) technical infrastructure and management capacity has been expanded as a result of technology transfer, C) institutions and relations are maintained in Vietnam, the region, and the international community to support Vietnam's efforts of sustainable management of the Tonkin Gulf, particularly the Archipelago, and D) useful summary documents have been developed and distributed.

The National Ocean Service and IUCN will produce two annual reports during this Project. The first will summarize accomplishments, lessons learned, and issues at the mid-point of the two year project. The second report will be a final summary of the Project with assessments and recommendations relevant to the Gulf of Tonkin's continued sustainable development. The National Ocean Service will fund development of these reports.

Organizational Capability

The National Oceanic and Atmospheric Administration is an internationally recognized leader in coastal management and environmental stewardship. Extensive partnerships with governmental and non-grovernmental organizations including University, community, technology and service provides, and local governments, provide the foundation for effective implementation of this international program. In addition, NOAA's National Ocean Service is developing a program in the northern region of the Gulf of Tonkin with the People's Republic of China which addresses related topics critical to sustainable management of the region.

IUCN-Vietnam has been actively working with different ministries in development and successful implementation of environmental projects including, among others, a capacity building project with the National Environment Agency (NEA) of the Ministry of Science Technology and Environment (MOSTE) entitled, "Strengthening of the Environmental Management Authority". IUCN has also been providing technical advice through a long term technical advisor based in the Agency. Under the framework of the project, IUCN has also assisted the Government in developing a National Environmental Protection Strategy (2001-2010) and the National Environmental Action Plan (2001-2005). In close cooperation with Ministry of Fisheries (MOFI), IUCN is executing and implementing a 4-year pilot project to establish the Hon Mun MPA. A Program on Provincial Coastal Management, funded by SIDA and executed by IUCN has also recently been concluded. A capacity building project with the Ha Long Bay Management Authority (HLBMA) has also been developed by IUCN and submitted to donors for consideration. A national Wetland Conservation and Sustainable use program is also being developed by a partnership of IUCN – MOSTE/NEA.

Institutional Management

This project will be implemented through partnership of several international organizations, the NOAA, and the Government of Vietnam. The Vietnamese Governmental agency is the Oceanology Institute in Hai Phong (HIO) (the Institute is under the Vietnam National Center for Natural Science and Technology). Together with IUCN, NOAA, and the HIO, and various relevant Quang Ninh provincial department (e.g. Department of Science, Technology and Environment (DOSTE), Department of Fisheries (DOFI), Ha Long Bay Management Authorities etc.) will be close partners in implementing the project. National Project Office will be established locally at the HIO and a Project Coordinator will be identified..

Based on experiences working in Vietnam, IUCN-Vietnam will be the principal international executing agency of the project, coordinating contributions and activities with the Government of

Vietnam, U.S. technical agencies and international experts. IUCN-Vietnam will be the principle liaison with the Vietnamese government. IUCN and NOAA will be jointly responsible for overall management of the project. Finally, a web site will be created at www.nos.noaa.gov/ipo/asia/vietnam to provide access to reports and other information developed through this 2-year project.

Budget and Financial Oversight

EAPEI funding of \$200K will be matched with \$138K of in -kind and program support contributions from the National Ocean Service and its U.S. partners, \$30K funding and program planning leveraged with IUCN/GEF and Reef Check, and \$10K in-kind from the Vietnamese government. A budget overview and Standard Forms 424 and 424a are provided in Appendix 3.

A local project office will be established at the HIO to oversee implementation of this program and integration of activities contained herein with efforts of other national and international organizations in the Gulf region. This will improve efficiency of multi-agency efforts and improve results and outcomes. The local project office will be provided with needed office equipment and facilities. These cost and project management oversight will be covered by \$19K of the EAPEI Grant with additional in-kind contributions from the Government of Vietnamese (\$10K), the IUCN/GEF (\$9K), and administrative support from NOAA's National Ocean Service (\$30K)

Financial oversight of the EAPEI grant will be undertaken by the National Ocean Service and the IUCN Vietnam Office. The NOAA National Ocean Service will be ultimately responsible for preparing budget reports for USAID while the IUCN-Vietnam will be the primary implementing agency for activities and field coordination. NOAA and IUCN budget accounting practices will be consistent with requirements of USAID as both agencies have received EAPEI funding in recent years.

Potential for Continuance and Impact Beyond Life of EAPEI Grant Period

The U.S. Government and the Government of Vietnam established the US-Vietnam Science and Technology Agreement (STA) in January 2001. NOAA is exploring potential institutional relationships in fisheries and meteorological cooperation that would take place under this framework STA. In addition, a GEF PDF Block B Grant request (see appendix) is under preparation for submission to the Global Environmental Facility for \$350K covering the years 2002 to 2003. If funded, the GEF PDF-B will develop an \$8-10 million dollar proposal for the GEF to implement an ICM regime for the North Tonkin Archipelago and protect marine biodiversity and international waters. Finally, on June 8, 2001, the GEF/WB/Danida/IUCN funded pilot MPA project in Hon Mun was successfully launched at a workshop in Nha Trang, Vietnam. This project involves IUCN-Vietnam and Vietnamese governmental counterparts including the Ministry of Fisheries and the Khanh Hoa Provincial People's Committee. With the initiation of the Hon Mun project and with the generous support from GEF, World Bank, Danida and IUCN an important first step has been taken in the development of a strong and

representative Marine Protected Area network in Vietnam. Efforts in the Hon Mun project will be coordinated and leveraged with related efforts in the NTA project sponsored by US AID, IUCN-Vietnam, and NOAA.

This EAPEI Project integrates U.S. expertise with recent, current and planned activities in Vietnam involving the IUCN, GEF, UNDP, Reef Check, and others. The Project has been designed specifically to provide necessary institutional relationships and technological capacity for fostering an integrated coastal management regime in a discrete section of the Gulf of Tonkin. Success in this two year EAPEI project will provide valuable lessons learned and strengthen strategies to develop an operational and cost effective integrated coastal management regime in Vietnam's national context.

The Government has identified the coastal zone of Quang Ninh Province, including the Tonkin Archipelago, as a major development region for the country. In November 1997, the "Workshop on Coastal Biodiversity Priorities" (Hanoi, SRV) assessed ICM developments in the nation. In 1999, the World Bank supported an International Conference, to define options for comprehensive development in coastal Quang Ninh. And, over the past two years, the Government has increased budgets and staffing of key agencies in the Project Area in a demonstration of its commitment to develop ICM in the region. In addition, the National GEF Committee has placed the Northwest Tonkin Archipelago on its list of priority initiatives for the GEF.

With a Country Office in Vietnam, IUCN's role is critical to sustaining attention on ICM efforts and coordinating related investments of various organizations to produce the best possible results. By supporting the efforts of the IUCN and NOAA to transfer and apply international management and technical expertise to the region, this EAPEI will tangibly improve domestic management practices for the North Tonkin Archipelago. It will also provide cooperation relationships among critical management agencies in the region (including Vietnam and China) for sustained coordination and communication of habitat and marine resource management. Finally, this project will strengthen the ability of the Vietnamese government and the IUCN to define subsequent, regional priorities for affecting resource management practices with more effective coordination of technical, administrative, policy and community inputs from leading institutions and stakeholders.

Appendices

- 1. Project Area
- 2. Activities Chronology and Gantt Chart
- 3. Budget: Overview, SF424, and SF424a
- 4. Principal Partners
- 5. IUCN PDF Block B Grant to GEF, "Integrated Management of the Northwest Tonkin Archipelago"
- 6. US-Vietnam Science and Technology Agreement
- 7. Letters of support

I. Project Area



QUANG NINH PROVINCE

Land area 5,938.6 km2

Population: 938 thousand people Population density: 150 person/km2

Capital: Ha Long

Principal Towns: Campha, Uongbi

Administrative districts (9): Binhlieu, Bache, Tienyen, Hoanhbo, Haininh, Quangha,

Dongtrieu, Yenhung, Vandon, Coto

Primary Economic Resources: forestry, marine resources, coal

Quang Ninh is located in the northeastern part of Vietnam. It shares a 170–km border with China and is surrounded by Lang Son, Bac Giang, Hai Duong, and Haiphong provinces. Several ethnic groups live in this province, including Kinh, Dao, and Tay. The tropical, humid climate has an average annual temperature is 25°C.

Ha Long Bay covers an area of 1,500 sq. km and is dotted with thousands of islands and grottoes rising from the clear, emerald waters of Bac Bo Gulf. The United Nations Education, Science and Culture Organization (UNESCO) has recognized Ha Long Bay as world heritage area. Major

tourist attractions include: Cua Ong Temple, Mount Yen Tu, Hang Dau Go (the Grotto of Wooden Stakes), Bo Nau Grotto, Mount Bai Tho (Poem)

II. Work Schedule

III. Budget Overview (\$USD)

Table 1

Activity	Title	NOAA and US Partners* Cash/in- kind	EAPEI	SRV Government	IUCN/GEF	Total
1	ICM Workshop and Kickoff Meeting	\$25K	\$25K		\$3K	\$53K
2	ICM Theory into Practice: Annual Integrated Coastal Management Plans	\$28K	\$57K		\$3K	\$88K
3	Socioeconomic Assessment Training and Report	\$10K	\$30K		\$2K	\$42K
4	Habitat Mapping and Monitoring	\$10K	\$30K		\$3K	\$43K
5	Community Education and Outreach	\$15K	\$15K		\$5K	\$35K
6	Boundary Marking (Mooring Buoys)	\$10K	\$20K			\$30K
7	Tonkin Gulf Regional Network	\$5K	\$4K			\$9K
8	Translate and publish key relevant books and documents	\$5K			\$5K	\$10K
	Project Office Operation, budget and financial oversight, including discretionary reserve	\$30K	\$19K **	\$10K	\$9K	\$68K
TOTAL		\$138K	\$200K	\$10K	\$30K	\$378K

^{*} includes in-kind support ** including costs for project office operation and for management and oversight and implementation of program

EAPEI Grant	Activities:	\$181 K
	Management and Oversight:	<u>\$ 19 K</u>
	Sub Total	\$ 200 K
II C Covernment Com	Authoration	¢ 120 V
U.S. Government Cor	itribution	\$ 138 K
Socialist Republic of Y	Vietnam Contribution	\$ 10 K
IUCN/GEF		\$ 30 K
	Sub Total	\$178 K
	TOTAL	\$270 V
	TOTAL	\$378 K

Continuation Section B: Budget Categories Activities 5-9

	Activity 5: Educ/ Outreach	Activity 6: Buoys	Activity 7: Regional Network	Sub Total Activities 5-7	Grand Total
c. Travel	\$3K	\$8K	\$4K	\$15K	\$81K
d. Equip	\$5K	\$9K		\$14K	\$30K
e. Supplies	\$2K			\$2K	\$13K
f. Contract	\$3K	\$3K		\$6K	\$41K
h. Other	\$2K			\$2K	\$16K
i. Total	\$15K	\$20K	\$4K	\$39K	\$181K
Direct					
j. Indirect	\$1.5K	\$2K	\$.4K	\$3.9K	\$ 19K
TOTALS	\$16.5K	\$22K	\$4.4K	\$42.9K	\$200K

SF424 AND SF424a are completed with the following assumptions:

Section A: data summarized in above Table #1

Section B: Includes EAPEI Grant Funds only

Section D: Does not include in-kind contributions from NOAA and does not include funding

contributions from international organizations, such as IUCN or GEF.

Section E: column (b) reflects figures for the first project year, 2001-2002.

IV. Principal Partners

Vietnamese Government Institutions

The Vietnamese Government has not established a clear-cut division of institutional responsibilities for managing the coastal and marine environment. There has been some effort to clarify institutional responsibilities. In 1998, marine resource management and the development of marine protected areas were handed to the Ministry of Fisheries, following guidelines in the 1995 Biodiversity Action Plan. A range of fishing practice regulations and directives has been introduced by MOF to protect marine resources and prosecute violators. Marine and coastal conservation is not the exclusive mandate of MOF. The Ministry of Agriculture and Rural Development is responsible for national parks including some marine areas. Similarly, the National Environment Agency (NEA) of the MOSTE, has key roles in biodiversity conservation and natural resource protection. There are regulations to protect coastal and marine areas under the Environmental Protection Law (1993), implemented by NEA. This evolving legal framework has not nurtured integrated development planning within the Project Area.

The provincial government has an important role in development planning and control of the coastal zone, and is responsible for management of key attractions such as the Halong WHA (the Halong Bay Management Department which has legal responsibility for management of the World Heritage Area). Principal provincial-level agencies and departments include Department of Science and Technology (DOSTE), Department of Fisheries (DOFI), Department of Planning and Investment (DPI), Department of Agriculture and Rural Development (DARD), and Hai Phong Institute of Oceanography.

As a primary implementing Agency, the **Hai Phong Institute of Oceanography (HIO)** is Vietnam's national focal point for marine sciences and coastal marine environment in the ASEAN Region. HIO's main tasks include research on physical oceanography, seawater chemistry, marine/coastal geology and geo-dynamics, marine/coastal ecology and biological resources, marine/coastal environment and solutions for environment protection. Supply scientific and technological services related to oceanography and marine sciences. take part in the training education of oceanography and marine environment at B. Sc, M. Sc. and Ph. D levels.

Since 1959, HIO has promoted national programme on: baseline investigation of Tonkin Gulf, and comprehensive investigation of Quang Ninh – Hai Phong coastal marine area, as well as Hai Phong – Ha Tinh area. HIO has carried out number of national projects and taken part in over 40 others related to following areas: marine biology, physical oceanography, marine chemistry, coastal/marine ecosystem, coastal wetlands, restoration of marine living resources, coastal erosion-siltation, coastal aquaculture, coastal/marine geology and geomorphology.

IUCN – The World Conservation Union and Vietnam Country Office

IUCN – The World Conservation Union was founded in 1948 and brings together 78 states, 112 government agencies, 735 NGOs, 35 affiliates, and some 10,000 scientists and experts from 181 countries in a unique worldwide partnership.

Its mission is to influence, encourage and assist societies throughout the world to conserve the integrity and diversity of nature and to ensure that any use of natural resources is equitable and ecologically sustainable.

Within the framework of global conventions, IUCN has helped over 75 countries to prepare and implement national conservation and biodiversity strategies. IUCN has approximately 1000 staff, most of whom are located in its 42 regional and country offices while 100 work at its Headquarters in Gland, Switzerland. IUCN's Vietnam country office has a staff of three experts on site in Vietnam managing and developing programs for coastal and marine resource management. (www.iucn.org)

The IUCN-Vietnam has developed national goals based on a synthesis of key environmental issues in the country, historical intervention by the Union, the global priorities of IUCN and involvement of other international conservation organizations in Vietnam. IUCN Vietnam has prepared a strategic approach towards the development of its technical program. The main focal areas are institutional capacity building, policies and national strategies and action plan covering:

- Biodiversity conservation, especially wetlands and marine resources
- Sustainable use of natural resources and forest conservation
- Pollution prevention, particularly small and medium enterprises
- Environmental economics
- Biodiversity/Environmental awareness
- Integrated planning
- Sustainable tourism

National Ocean Service (U.S. Department of Commerce/NOAA)

The National Ocean Service grew out of the nation's oldest scientific agency, established as the Survey of the Coast in 1807 by President Thomas Jefferson. Today, NOS is responsible for the science and management of the U.S. coastal and ocean areas to support the nation's economic prosperity and environmental well-being. NOS provides world class products and services that protect millions of lives, billions of dollars in property and irreplaceable natural resources every day. These activities provide NOAA with the capability to balance environmental concerns with economic growth and fulfill its stewardship responsibilities. They strengthen the nation's economic development by providing better information and innovative approaches for coastal management.

NOS provides world class information products and services to aid domestic and global commerce, promote safe and efficient marine transportation, and add to our understanding for

effective management of the world's coastal areas in the form of: Nautical charts, tide and tidal current tables and real-time water levels and currents in ports and harbors, geodetic reference network which is the standard for all surveying and mapping in the U.S., working with the international community. NOS builds partnerships with state and local governments, manages a network of 12 National Marine Sanctuaries, works to protect coastal communities for oil spills, maintains a national network of monitoring programs, and manages with state partners 450,000-acre system of 22 National Estuarine Research Reserves. (www.nos.noaa.gov)

Reef Check

Reef Check is the largest international coral reef monitoring program involving recreational divers and marine scientists. In 1997, Reef Check teams completed the first global survey of coral reefs. Over 750 volunteer sport divers were trained and led by 100 volunteer scientists in surveys of more than 300 reefs in 31 countries. The results of Reef Check 97 provided the first solid evidence that coral reefs have been damaged on a global scale. Reef Check 98 covered 40 countries and documented an unprecedented global bleaching and mortality event (Results of Reef Check 98). In addition to producing valuable scientific results, Reef Check 97 raised the awareness of scientists, governments, politicians and the general public about the value of coral reefs, threats to their health and solutions to coral reef problems. This message was spread worldwide by TV coverage including CNN and BBC, and by major newspapers and magazines in a dozen languages. Due to popular demand, from now on Reef Check will be repeated every year. The more people and countries that participate, the bigger the media attention will be, and the faster solutions can be implemented. Reef Check has been selected to be the "community-based" survey program for the United Nations' Global Coral Reef Monitoring Network. Reef Check helps local community members learn how to monitor their coral reefs, providing the information needed so that they can be managed in a sustainable manner. Participation in Reef Check is one of the best methods of changing people's behavior and slowing the damage so that reefs can recover. (http://www.reefcheck.org/)

Reef Check Foundation GPO Box 12375, Hong Kong www.ReefCheck.org

VIETNAM PROPOSAL EAPEI

Jonathan Justi National Ocean Service/NOAA Building: SSMC4 Room: 13336 1305 EAST WEST HWY SILVER SPRING MD 20910-3282

January 7, 2001

Dear Mr. Justi,

I would like to express the support of the Reef Check Foundation for the proposed project, "Building Capacity for Integrated Coastal Management in the Gulf of Tonkin."

Since carrying out the first scuba and reef survey training course in Vietnam in 1993 I have been working on a variety of ICM projects in Vietnam and have been extremely impressed with the enormity of the ICM problems and the dedication of the Vietnamese. The US is far behind other nations in assisting Vietnam to solve these problems.

Since 1998, Reef Check has been operating very successfully in Vietnam with our partners at the Institute of Oceanography, Nha Trang. We hope to expand that success with our related proposal to EAPEI called "*Network Capacity-Building: Providing the Tools for Communities to Manage Coral Reefs in SE Asia.*" Together these two proposals would allow for a significant team effort in Vietnam to tackle pressing marine environmental problems.

It should be noted that Reef Check has been working with NOS/NOAA in China, and has recently completed the first Coral Reef Monitoring Training Course in Hainan. This is an example of the successful partnership between Reef Check and NOS. Should this proposal be successful, we would look forward to partnering with NOS in this project.

Sincerely,

Gregor Hodgson, PhD

Director

Center for Environment RRB 3.08-80A 1300 Pennsylvania Ave, NW Washington, D.C. 20523-3800

Dear Mr. Resch:

I am pleased to submit the enclosed proposal to the East Asia Pacific Environmental Initiative (FY 2001) for your consideration. The proposed program leverages and coordinates expertise, efforts, and experience of the Government of the Socialist Republic of Vietnam, the National Oceanic and Atmospheric Administration, the IUCN-World Conservation Union, Reef Check, and others to promote rational use of renewable natural resources in East Asia and the Pacific, specifically in the Gulf of Tonkin Archipelago.

This request supports the three goals of the East Asia Pacific Environmental Initiative by improving land use management, coastal resources management, and environmental planning in Gulf of Tonkin Archipelago of the Socialist Republic of Vietnam. Results of this two year program will increase the capacity of national and regional institutions in Vietnam to develop effective tools, mechanisms and management practices to preserve the regions natural marine and coastal resource base beyond the duration of the project. It also promises to become a critical capacity-building case study and basis for expanded national and regional ICM program development in subsequent years.

This EAPEI request comes at a critical time when integration of complementary goals and expertise of various organizations is needed to improve the effectiveness of investments and lay the foundation for broadened geographic benefit. This proposal meets those needs and enables Vietnam to access the technical expertise and experience of the United States as that nation plans coastal development priorities and strategies.

I look forward to hearing from you and hope to work with you to implement this project

Sincerely,

Charles N. Ehler, Director International Program Office

and

Vice Chair, IUCN-Marine World Commission on Protected Areas